## **Human Kappa Light Chain Monoclonal Mouse** Antibody (HP6053)



## **Product Description**

This MAb is specific to kappa light chain of immunoglobulin and shows no cross-reaction with lambda light chain or any of the five heavy chains. In mammals, the two light chains in an antibody are always identical, with only one type of light chain, kappa or lambda. The ratio of Kappa to Lambda is 70:30. However, with the occurrence of multiple myeloma or other B-cell malignancies this ratio is disturbed. Antibody to the kappa light chain is reportedly useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is malignant. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Call us: 800-304-5357

| Antibody reactivity (target) Antibody type  Host species  Mouse  Clonality  Monocional  Ligg1, kappa  Molecular weight  Synonyms  HCAK1; Ig Kappa Chain C Region; IgKC; Immunoglobulin KM  Human gene symbol  Entrez gene ID  3514  SwissProt  Unigene  Antibody target cellular localization  Antibody application Species reactivity  Antibody application notes  Higher concentration may be required for direct detection with secondary antibody. Immunofislogy formalin-fixed tissues requires boiling issue sections in 0 nm Light guiser Westen boileng 3-1, Raji or hPBL cells. Tonsil or Spleen  Shipping condition  Storage Conditions  Antibody/conjugate for mealanchies at -10 to -35 °C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  Antibody research areas  Cell/tissue expression  Antibody research areas  Antibody research areas  Cell/tissue expression  Antibody research areas  Mouse  Poilo1 & Rappa Chain C Region; IgKed  Region; IgKeappa Chain C Region; IgKed  Mouse  Poilo1 & Rappa Chain C Region; IgKed  Mouse  Molecular weight  Mouse  Mous | Antibody number  | #0681  |  |  |  |
|--|--|--|--|--|--|
| (target)         Antibody type         Primary, Anti-Human Immunoglobulin           Host species         Mouse           Clonality         Monoclonal           Clone         HP6053           Isotype         IgG1, kappa           Molecular weight         -22.5 kDa           Synonyms         HCAK1; Ig Kappa Chain C Region; IGKC; Immunoglobulin KM           Human gene symbol         IGKC           Entrez gene ID         3514           SwissProt         P01601 & P01834           Unigene         449609           Immunogen         Purified human Ig kappa chain           Antibody target cellular localization         Plasma membrane, Secreted (extracellular)           Verified antibody applications         HC (FFPE) (verified)           Species reactivity         Higher concentration may be required for direct detection using primary antibody.           Human         Higher concentration may be required for infect detection with secondary antibody.           Immunohistody formalin-fixed tissues requires boiling tissue sections in 10 min followed by cooling at RT for 20 minutes western botting 0.5-1.0 ug/m., Flow Cytometry 0.5-2.0 ug/millin-fixed 0.5-1.0 ug/m., Flow Cytometry 0.5-2.0 ug/millin-fixed 0.5-1.0 ug/m., Flow Cytometry 0.5-2.0 ug/millin didution final a specific application should be determined by user           Positive control         293T, Raji or hPBL cells. Tonsil or Spleen   | <del>-</del>   |  |  |  |  |
| Host species   Mouse   |  |  |  |  |  |
| Clone IP6053 Isotype IgG1, kappa Molecular weight -22.5 kDa Synonyms HCAK1; Ig Kappa Chain C Region; IGKC; Immunoglobulin KM Human gene symbol IGKC Entrez gene ID 3514 SwissProt P01601 & P01834 Unigene 449609 Immunogen Purified human Ig kappa chain Antibody target cellular localization (extracellular) Verified antibody application Species reactivity Antibody application Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistology formalin-fixed 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen Shipping condition Room temperature  Storage Conditions Cross Schefe Guaranteed for at least 24 months from date of receipt when stored as recommended Regulatory status For research use only (RUO) Antibody/conjugate formulation Antibody research areas Cancer, Immunology, Inflammation Antibody research areas Cancer, Immunology, Inflammation   |  | · -  |  |  |  |
| Clone HP6053  Isotype IgG1, kappa  Molecular weight -22.5 kDa  Synonyms HCAK1; Ig Kappa Chain C Region; IGKC; Immunoglobulin KM  Human gene symbol IGKC  Entrez gene ID 3514  SwissProt P01601 & P01834  Unigene 449609  Immunogen Purified human Ig kappa chain  Antibody target cellular localization  Verified antibody applications Species reactivity  Antibody application  Antibody application direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistology formalin-fixed 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition Room temperature  Storage Conditions  Storage Conditions  For research use only (RUO)  Antibody/conjugate formulation  Antibody/conjugate formulation  Positive expression  Antibody research areas  Cancer, Immunology, Inflammation  | •  |  |  |  |  |
| Isotype   IgG1, kappa  | -  |  |  |  |  |
| Molecular weight   -22.5 kDa   | Isotype  |  |  |  |  |
| Synonyms   |  | 9  |  |  |  |
| Entrez gene ID  SwissProt  P01601 & P01834  Unigene  Immunogen  Antibody target cellular localization  Verified antibody applications Species reactivity  Antibody application notes  Antibody application notes  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 nm citrate buffer, pH 6.0, for 10-20 min tollowed by cooling at RT for 20 min tollowed by cooling at RT for 20 min using primary antibody.  Positive control  293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition  Storage Conditions  To use at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at 1-0 to -35 °C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Antibody/conjugate formulation  Antibody research areas  Callotissue expression  Antibody research areas  Cancer, Immunology, Inflammation   | · ·  | HCAK1; Ig Kappa Chain C Region;  |  |  |  |
| SwissProt Unigene Immunogen Purified human Ig kappa chain Antibody target cellular localization Verified antibody applications Species reactivity Antibody application notes  Antibody application of direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Stahing of formalin-fixed tissues requires boiling tissue sections in 10 mh citrate buffer, pH 6.0, for 10-20 min citrate buffer, pH 6.0, for 10-20 mi | Human gene symbol                                      | IGKC   |  |  |  |
| Unigene 449609  Immunogen Purified human Ig kappa chain  Antibody target cellular localization (extracellular)  Verified antibody applications Species reactivity  Antibody application notes  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Stahing of formalin-fixed tissues requires boiling tissue sections in 10 mk citrate buffer, pH 6.0, for 10-20 min tollowed by cooling at RT for 20 minutes Western blotting 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition  Storage Conditions  To research use only (RUO)  Antibody/conjugate formulation  Antibody/conjugate formulation  Positive control 2037. Raji or hPBL cells. Tonsil or Spleen  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Antibody/conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation  | Entrez gene ID   | 3514   |  |  |  |
| Immunogen  | SwissProt  | P01601 & P01834  |  |  |  |
| Antibody target cellular localization (extracellular)  Verified antibody applications Species reactivity  Antibody application notes  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Stahing of formalin-fixed tissues requires boiling tissue sections in 10 mk citrate buffer, pH 6.0, for 10-20 min tollowed by cooling at RT for 20 minutes Western blotting 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition  Storage Conditions  Conjugates from light, Note: store BSA-free antibodies at 1-0 to -35 ° C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Antibody/conjugate formulation  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation   | Unigene  | 449609   |  |  |  |
| Incalization   (extracellular)   | Immunogen  | Purified human Ig kappa chain  |  |  |  |
| applications Species reactivity  Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM, citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes Western blotting 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control  293T, Raji or hPBL cells. Tonsil or Spleen Shipping condition  Storage Conditions  |  |  |  |  |  |
| Antibody application notes  Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed tissues requires boiling itssue sections in 10 mh. citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes western blotting 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition Room temperature  Storage Conditions  Conjugates to milght, Note: store BSA-free antibodies at -10 to -35 °C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA/0.05% BSA/0.05% azide purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation  | Verified antibody                                      | IHC (FFPE) (verified)  |  |  |  |
| direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed 0.5-1.0 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mh. citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes Western blotting 0.5-1.0 ug/mL, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user  Positive control 293T, Raji or hPBL cells. Tonsil or Spleen  Shipping condition Room temperature  Storage Conditions Store at 2 to 8 °C. Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Shelf life Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status For research use only (RUO)  Antibody/conjugate formulation Formulation Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA/0.05% BSA/0.05% BSA/0.05% azide purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression B-cells  Antibody research areas Cancer, Immunology, Inflammation   | Species reactivity                                     | Human  |  |  |  |
| Spleen  Spleen  Spleen  Shipping condition  Storage Conditions  Span-free antibodies at -10 to -35 ° C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation   |  | conjugates than for indirect detection with secondary antibody. Immunohistology formalin-fixed 0.5-1.0 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, ph 6.0, for 10-20 min followed by cooling at RT for 20 minutes Western biotting 0.5-1.0 ug/ml, Flow Cytometry 0.5-2.0 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by |  |  |  |
| Storage Conditions Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Shelf life Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status For research use only (RUO) Antibody/conjugate formulation Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/ Purified: 0.2 mg/mL in PBS/0.05% BSA/ Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression Antibody research areas Cancer, Immunology, Inflammation   | Positive control                                       |  |  |  |  |
| conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Shelf life  Guaranteed for at least 24 months from date of receipt when stored as recommended  Regulatory status  For research use only (RUO)  Antibody/conjugate formulation  Conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation   | Shipping condition                                     | Room temperature   |  |  |  |
| date of receipt when stored as recommended  Regulatory status For research use only (RUO)  Antibody/conjugate formulation SSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified; BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression B-cells  Antibody research areas Cancer, Immunology, Inflammation   | Storage Conditions                                     | conjugates from light, Note: store   |  |  |  |
| Antibody/conjugate formulation  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation  | Shelf life   | date of receipt when stored as   |  |  |  |
| formulation  BSÁ/0.6% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purfiled: 0.2 mg/mL in PBS/0.05% BSA, Purfiled: 0.2 mg/mL in PBS/0.05% BSA/0.65% azide Purfiled, BSA-free: 1 mg/mL in PBS without azide  Cell/tissue expression  Antibody research areas  Cancer, Immunology, Inflammation  |  |  |  |  |  |
| Antibody research areas  | Regulatory status                                      | recommended  |  |  |  |
|  | Antibody/conjugate                                     | recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Durified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA  |  |  |  |
|  | Antibody/conjugate formulation                         | recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide   |  |  |  |
| Tumor expression Leukemia/lymphoma   | Antibody/conjugate formulation  Cell/tissue expression | recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% zaide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide Purified, BSA-free: 1 mg/mL in PBS without azide  B-cells  |  |  |  |

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| Antibody # prefix | Conjugation           | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-----------------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S               | 404/431    | 405        | DAPI (microscopy),<br>AF405 | CF®405S Features |
| BNC88             | CF®488A               | 490/515    | 488        | GFP, FITC                   | CF®488A Features |
| BNC68             | CF®568                | 562/583    | 532, 561   | RFP, TRITC                  | CF®568 Features  |
| BNC94             | CF®594                | 593/614    | 561        | Texas Red®                  | CF®594 Features  |
| BNC40             | CF®640R               | 642/662    | 633-640    | Cy®5                        | CF®640R Features |
| BNC47             | CF®647                | 650/665    | 633-640    | Cy®5                        | CF®647 Features  |
| BNCB              | Biotin                | N/A        | N/A        | N/A                         |                  |
| BNUB              | Purified              | N/A        | N/A        | N/A                         |                  |
| BNUM              | Purified,<br>BSA-free | N/A        | N/A        | N/A                         |                  |

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